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AUTHOR Cavoti, Nicholas J.
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ABSTRACT

Outcomes of college attendance for business and humanities majors were compared. Two assessment instruments developed by the American College Testing Program were used: the College Outcomes Measurement Project (COMP) and the Alumni Survey. For a sample of college seniors from 52 colleges, the COMP tests were used to measure performance in the following six general outcomes areas: communications, problem solving, clarifying values, functioning within social institutions, using science and technology, and using the arts. For the Alumni Survey, 1,959 humanities graduates and 3,164 business graduates were studied. Alumni attitudes were examined as a function of academic major and the number of years since graduation. Pursuit of continuing education by alumni, their career paths, and salaries were also assessed. It was concluded that humanities study develops general skills of value in a wide range of careers, and that the humanities contribute relatively more than business curricula to the development of three critical skills: writing, speaking, and understanding written information. Further, while a humanities major is not a prerequisite for business success, study of humanities disciplines contributes to the development of cognitive skills, social skills, and work habits considered indispensable to today's business environment. (SW)

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A Comparison of Educational Outcomes for Business and Humanities Majors

Nicholas J. Cavoti

Associate Professor of Psychology
Washington and Jefferson College

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Importance of Measuring Outcomes

Surveys measuring the attitudes of contemporary college and university students demonstrate a strong expectation that higher education should contribute toward employability. Enrollment statistics over the past decade reveal an exodus from the humanities and the liberal arts in general toward technical, vocationally-oriented disciplines. It would appear that career-conscious students believe the study of the humanities to be a scholarly, but not terribly relevant or practical activity--a luxury they can no longer afford.

The logical way to combat this trend is to produce evidence that humanities study provides transferable skills which meet the demands of the real world. Unfortunately, the outcomes of coursework in the humanities are not as readily apparent as those of many other disciplines. How, for example, is the student changed by a thoughtful analysis of Plato or of T.S. Eliot? Anyone who has seriously studied the humanities has at least a gut feeling for the experience. We recall, perhaps, the feeling of an added dimension, or that our world had changed from what it was.

Those who teach humanities courses "know" that the student who has made even a modest investment in the learning process has grown. The change might be characterized as a shift from concrete to formal patterns of reasoning, or perhaps, as a move from the superficial to more thoughtful and articulate treatment of complex ideas. But, these arguments are convincing only to the

already converted. The problem is that they remain complex, literary descriptions which do not readily suggest objective evaluation.

Traditionally, the humanist has taken the position that many of the things that are taught in the humanities simply do not lend themselves to objective measurement. Today's career-oriented students, however, will no longer respond to arguments on faith; nor are they likely to be persuaded by a reference to the course syllabus or list of required readings. Instead, humanists need (1) to conceptualize and present their courses in terms of the measurable changes that they produce in students, and (2) to convince students that these outcomes include skills that are directly applicable to a wide range of careers.

Some progress has already been made in the measurement of outcomes in the liberal arts. Winter, McClelland, and Steward, in A New Case for the Liberal Arts, provide an excellent review of the pertinent issues and research, along with a provocative system of new measures of educational outcomes.

The present research, however, is based on two assessment instruments developed by the American College Testing Program. The first, the College Outcomes Measurement Project (COMP) was designed specifically to help postsecondary institutions to improve their methods of assessing general education outcomes. The second instrument, the Alumni Survey, was developed to help collegiate institutions to measure the impact that the institution has had on its graduates.

The COMP Study

The College Outcome Measurement Project was organized in 1976 in order to develop instruments that would assess student learning outcomes within the general education component of postsecondary curricula. The COMP tests reported in this study measure performance in the following six general outcomes areas:

Communications: Can send and receive information in a variety of modes (written, graphic, oral, numeric, and symbolic), within a variety of settings (one-to-one, in small and large groups), and for a variety of purposes (for example, to inform, to understand, to persuade, and to analyze).

Solving Problems: Can analyze a variety of problems (for example, scientific, social, personal); select or create solutions to problems; and implement solutions.

Clarifying Values: Can identify one's personal values and the personal values of other individuals; understand how personal values develop; and analyze the implications of decisions made on the basis of personally held values.

Functioning within Social Institutions: Can identify those activities and institutions which constitute the social aspects of a culture (for example, governmental and economic systems, religion, marital and familial institutions, employment, and civic volunteer and recreational organizations); understand the impact that social institutions have on individuals in a culture; and analyze one's own and other's personal functioning within social institutions.

Using Science and Technology: Can identify those activities and products which constitute the scientific/technological aspects of a culture (for example, transportation, housing, energy, processed food, clothing, health maintenance, entertainment and recreation, mood-altering, national defense, communication, and data processing); understand the impact of such activities and products on the individuals and the physical environment in a culture; and analyze the uses of technological products in a culture and one's own personal use of such products.

Using the Arts: Can identify those activities and products which constitute the artistic aspects of a culture (for example, graphic art, music, drama, literature, dance, sculpture, film, architecture); understand the impact that art in its various forms, has on culture and one's personal use of art. (Forrest; 1982, pp. 11-12).

COMP offers, then, a clearly defined, objective measure of the learning assumed to take place in the general education courses commonly referred to as the core curriculum.

COMP scores and field of study. We wondered how the COMP measure might be related to the current enrollment trends toward more specialized training. It seemed

reasonable to hypothesize that as students take more of their courses in vocationally-oriented programs, they would have fewer opportunities to study traditional humanities courses beyond the basic core requirement. If we assume that the humanities emphasize and reinforce the abilities developed in general education courses, we reasoned that it would be interesting to compare the COMP performance of humanities majors to the performance of those specializing in other academic areas.

A sample was taken of 4,627 students from 68 colleges and universities across the nation. Although not a representative national sample, the students in this study reflect a highly diverse group of seniors from the middle band of 4-year colleges and universities in most geographic areas of the country. The following four categories of academic majors were compared in the study:

Arts & Humanities: English, fine arts, foreign languages, history, geography, literature, philosophy, speech, music, religion, liberal and general studies, and cultural studies;

Natural Science: physics, chemistry, biology, agriculture, allied health, astronomy, botany, zoology, engineering, geology, home economics, math and computers, and physical education.

Social Sciences: business, elementary education, anthropology, political science, psychology, secretarial sciences, social sciences, social work, and sociology;

Business Administration: We were able to isolate this group for comparison from the above general social studies category. It is comprised of 407 students from 10 universities.

For each student in the sample we were able to determine a freshman ACT and equivalent freshman COMP score, plus a senior COMP score and profile. These data enabled us to compare freshman and senior levels of competence in areas of general education and to compute score gains over the four years of undergraduate training. When we compared the performance of the four academic concentrations we found: (1) no differences in the average freshman scores among the four academic concentrations; (2) no differences in the average senior or exiting COMP scores among the academic concentrations;

and (3) senior performance exceeded freshman levels, with all four academic concentrations showing equivalent score gains. The data indicate clearly that there is no relationship between score gains and major field of study.

While we had hoped that humanities majors would show differentially greater score gains than some of the other academic areas, there are some reasonable explanations and alternative interpretations of the findings. If we go back to the COMP tests, we are reminded that they are designed to measure the performance changes produced by general education courses rather than the intended outcomes of advanced study in the various major field. In fact, the greatest score gains on the COMP measures generally occur during the first two years of college, with very little additional increment during the senior year.

Winter, et. al. (1981) reported related findings under circumstances roughly analogous to the present study. They compared the speed and accuracy with which freshmen and seniors from a range of collegiate institutions learned new information selected from the humanities, the social sciences, and the natural sciences. Their findings indicated, not only no effect of academic major, but contrary to the present study, no difference between freshman and senior performance. Even at the most selective academic institution, graduating seniors who had specialized in one of the three areas were no better able to acquire new information in that area than were the entering freshmen.

The results of these two studies taken together would suggest that there is no specific major field that facilitates learning either in that particular area of knowledge or in general education, as measured by learning outcomes.

COMP scores and characteristics of the institution. Another option that we had in considering the data was to plot the average COMP score gain for 52 of the institutions represented in the study (16 of the institutions were not included due to insufficient sample size). It is obvious from these data that some institutions are more successful in achieving their general education goals than others. Aubrey Forrest, at ACT, has identified several characteristics that differentiate collegiate institutions which produce large score gains.

One very important characteristic of these institutions is the liberal arts distribution requirement.

We find that institutions which produce large COMP score gains have large general education requirements--at least 40% of the BA program--evenly distributed among the areas: (1) written and oral communication; (2) social science and history; (3) natural science; and (4) mathematics. They also offer remedial courses for those students who arrive at the institution with weak basic skills. It would appear that, although arts and humanities majors do not show differentially larger COMP score gains, students who attend institutions with large, evenly distributed liberal arts requirements do.

The present study, then, has shown that arts/humanities majors are graduating with general knowledge and skills (as measured by COMP tests) equivalent to the other three groups of majors. It shows also that arts/humanities majors grow as much in general ability during the four years of undergraduate study. Keeping in mind that COMP test scores have been found to be correlated positively with subsequent job supervisor ratings, we can also conclude that arts/humanities majors are as well prepared in general job-related skills as those individuals who major in other fields of study.

The Alumni Survey

The ACT Alumni Survey provides a different format for considering the outcomes of postsecondary education. It measures demographic data on college alumni along with their impressions of the quality of their undergraduate institution and the education that they obtained there.

In this study, we were interested in examining alumni attitudes as a function of academic major and the number of years since graduation. Although data were available for a wide variety of academic majors, we were most interested in, and shall report here, the comparison between the impressions of alumni who were humanities majors and those who majored in business fields. The academic majors included within these two categories

Humanities: (1,959 alumni) classics, comparative literature; creative writing; English, general; English literature; philosophy; religion and theology; speech, debate, forensic science; history;

art history and appreciation; foreign languages; and general studies.

Business Fields: (3,164 alumni) accounting; banking and finance; business economics; business management and administration; food marketing; hotel and restaurant management; labor and industrial relations; office management; marketing and purchasing; real estate and insurance; recreation and tourism; secretarial studies; and transportation and public utilities.

The data reported here are a subset of 5,123 alumni from a total sample of 20,694 individuals surveyed from January, 1980 to October, 1982. The educational institutions comprising the group can be described by the following characteristics; 98% were 4-year institutions; 75% were public colleges and universities; 25% were private colleges; 34% had enrollments under 3,000 students; 32% had enrollments of 3,000 to 5,999 students; 30% had enrollments of 6,000 to 10,000; and 4% had enrollments over 10,000 students.

Several important qualifications are necessary with respect to the data presented here. First, the data are not based on a random or pre-selected sample, and while a wide variety of colleges and universities are represented, they do not constitute a nationally representative data base. Second, the survey instruments were administered in different ways to different groups of alumni from the various institutions represented in the report. Third, males and females are not equally distributed within the academic areas reported here. Although there were more females (55%) in the total sample the following proportions of males and females developed as the data were sorted: recent humanities alumni (52% male); older humanities alumni (68% male); recent business alumni (59% male); and older business alumni (80% male). The underrepresentation of females within the business majors requires extreme caution in the interpretation of differences between humanities and business graduates. Especially with items related to employment history, salaries, and the like, the unequal proportion of males and females cannot be ruled out as an alternative or confounding consideration.

Finally, a word should be said about statistical and practical significance. In virtually each instance that two percentages are said to differ throughout the report,

these differences are statistically significant. When one is dealing with a large number of respondents, however, even a few percentage points can sometimes produce a statistically significant difference. Whether particular differences between the groups being compared imply a distinction of practical significance, can only be ascertained by a careful examination of the context, the relationship of the present case to other differences, and the actual numbers of alumni involved. If it is reported that humanities and business alumni do not differ on a particular measure, however, there is strong evidence that no practical difference exists.

Background and demographic information. As was indicated earlier, the total alumni group was divided into humanities and business majors plus recent alumni (0 to 4 years since graduation) and older alumni (5 or more years since graduation). Findings on these four subgroups will be presented throughout the remainder of the report. Whenever a comparison is described between business and humanities alumni, the responses of the recent and older cohorts have been combined for each academic category. Likewise, comparisons between recent and older alumni combine business and humanities subgroups for each cohort. When relevant, comparisons will also be made between recent and older alumni within the humanities and business categories.

The business alumni in the sample tended to be more recent graduates--25% of the recent business alumni had graduated less than 1 year before the time of the survey as compared to 19.7% of the humanities graduates, and 79.2% of the older business alumni graduated 5 to 9 years before the survey, as compared to 50% for the humanities majors. This difference in time since graduation was also reflected in the age of the older group, where business alumni had a median age in the 30 to 39 year range and the humanities alumni had a median age in the 40 to 61 year range. The median age of both groups of recent alumni was 25 to 26 years. Approximately the same proportion of alumni (31%) were married during their undergraduate years for both the business and humanities majors.

When educational level is measured as highest degree currently held, we find that business alumni hold a somewhat higher percentage of bachelors degrees at 72.2%, but humanities graduates have twice the percentage of masters, at 21.2%. Nearly 5% of humanities alumni have the doctorate degree, while less than 1% of the business

graduates hold that degree. A larger number of business majors (15.3%), however, indicated that they intended to continue their education at the same institution at which they completed the bachelors degree. Another difference in the educational background of the two groups is that twice the proportion (18.2%) of the business students attended undergraduate school part-time. They also transferred to other institutions in larger proportions (50% versus 37%) than their peers in the humanities.

Continuing education. Clearly, a larger share of the humanities alumni pursued education beyond the bachelors degree. Also, they felt (at 3 times the percentage of business graduates) that their college prepared them exceptionally well for continuing education. They planned to obtain advanced degrees in relatively larger numbers, earned more postgraduate credits, and were more likely to pursue their continuing education as full-time students.

We also observe some interesting distinctions between the two groups of alumni in their attitudes surrounding continuing education. For example, a higher percentage of humanities majors (25.6%) than business majors (16%) indicated that the main reason that they continued their education was career or job needs. Higher proportions of humanities graduates reported seeking postgraduate education for self-improvement. Nearly twice the proportion of business majors, however, indicated that they continued their education in order to increase their income. It would appear, that although humanities majors were more apt to see continuing education as necessary to meet career demands, the business alumni linked it more directly with earning power.

Alumni impressions about their undergraduate education. The largest and most detailed section of the Alumni Survey deals with impressions of alumni about their undergraduate institutions and the educations. We find here that those in the humanities were generally more positively disposed toward their institutions. Relatively more of them (40.1% versus 27.1%) gave the highest rating to the quality of education offered at their institutions as compared to other colleges and universities. They also exceeded the business alumni (74.2% to 62%) in feeling, regardless of the financial benefits, that their college had improved the quality of their lives. Despite stronger positive feelings

toward the institution, clearly larger proportions of humanities majors, as compared to those in business fields, indicated that they would not choose the same major if they could start college over.

Some of the most interesting and consistent differences between these two groups of alumni are found in Table 1. It contains the percentage of alumni who responded that their colleges contributed "very much" to their personal development in the 24 areas presented. You will notice that higher percentages of humanities majors saw their educations exerting a major influence in their personal growth in 18 of the 24 areas.

Some of those areas, although critical basic skills, might be classified as having an expected relationship to the humanities--writing effectively; speaking effectively; understanding written information; using the library; understanding different philosophies and cultures; understanding the interaction of man and the environment; recognizing assumptions, making logical inferences, and reaching correct conclusions; and understanding and appreciating the arts.

In other areas, we would be less likely to expect that relatively more humanities alumni would rate their education as contributing so much to their personal growth--working independently; learning on your own; following directions; caring for your own physical and mental health; working cooperatively in a group; organizing your time effectively; recognizing your rights, responsibilities, and privileges as a citizen; planning and carrying out projects; persisting at difficult tasks; and leading/guiding others. These areas of growth are much less academic in nature and would transfer directly to any occupation or career.

More business than humanities alumni felt that their collegiate institutions contributed "very much" to their professional growth in more practically-oriented areas--managing personal/family finances; understanding graphic information; understanding consumer issues; understanding and applying mathematics in your daily activities; defining and solving problems; and understanding and applying scientific principles and methods.

It must be noted, firstly, that all of the above are impressions by alumni of how much their undergraduate educations contributed to personal growth in specific areas. If more humanities alumni felt that their education contributed very much to their personal development

Table 1

The percentage of Alumni Responding "Very Much" to, How Much Did Your Education at This College Contribute to Your Personal Growth in Each of the Following Areas?

Area	Percent	Percent
	Humanities Alumni	Business Alumni
Writing effectively	50.0	32.0
Speaking effectively	42.7	27.5
Understanding written information	51.0	37.4
Working independently	55.4	47.3
Managing personal/family finances	14.2	32.2
Learning on your own	52.2	47.4
Understanding graphic information	13.8	21.5
Using the library	42.4	32.9
Following directions	32.9	24.9
Understanding consumer issues	10.0	31.0
Caring for your own physical and mental health	27.2	17.5
Working cooperatively in a group	39.8	35.7
Organizing your time effectively	43.7	37.1
Recognizing your rights, responsibilities, and privileges as a citizen	23.4	18.3
Planning and carrying out projects	40.8	34.3
Understanding and applying mathematics in your daily activities	6.9	25.6
Understanding different philosophies and cultures	53.7	24.1
Persisting at difficult tasks	49.0	37.2
Defining and solving problems	38.6	42.4
Understanding the interaction of man and the environment	31.3	18.4
Leading/guiding others	39.9	26.1
Recognizing assumptions, and making logical inferences, and reaching correct conclusions	38.8	33.9
Understanding and appreciating the arts	43.0	16.5
Understanding and applying scientific principles and methods	14.4	16.1

in writing effectively, it does not mean necessarily that humanities alumni write more effectively.

Secondly, one of the most obvious differences between the recent and older alumni was observed with these data. For all areas except caring for your own physical and mental health, larger percentages of recent than older business alumni felt that their education had contributed "very much" to their growth. The humanities showed little or no change during the same period. It would appear, then, that the business curricula in recent years were perceived by more of their alumni as contributing to specific areas of personal growth than they had been in previous years. The areas of the largest increases were--using the library; working cooperatively in a group; organizing your time effectively; defining and solving problems; and understanding the interaction of man and the environment.

Career paths. When asked, Which of the following best describes what you are doing?, the alumni responded as follows:

	Percent	
	<u>Humanities</u>	<u>Business</u>
Employed full time	58.7	73.5
Employed part time	4.6	2.8
Self-employed	5.4	5.1
College or college/job	15.7	7.8
Unemployed:		
Recent alumni	4.6	3.8
Older alumni	1.6	1.3

As we compare the full-time employment percentages, we should keep in mind that 71% of the business alumni are male versus 55% of the humanities graduates. Also, there are relatively higher percentages of humanities graduates still in college, and caring for home/family. Notice that equal proportions of business and humanities graduates demonstrate their entrepreneurial spirit.

When questioned about the problems encountered in obtaining the first job after graduation, relatively more

humanities majors than business rated the following as providing a major problem:

	Percent	
	<u>Humanities</u>	<u>Business</u>
Deciding what I wanted to do	21.6	16.7
Finding a job for which I was trained	29.1	17.0
Finding the kind of job I wanted	31.5	26.5

The two categories of alumni did not differ, however, in their response to the difficulty posed by the following:

Knowing how to find job openings
Scheduling interviews
Finding a job that paid enough
Finding a job where I wanted to live
Race/sex discrimination

The employment data indicated that humanities majors had a tougher time finding their first job. While 39.9% of the business majors had jobs before graduation, the corresponding percentage among the humanities group is 19.6%. The median time to find a job for the business graduates was under 1 month, and for the humanities major, 1 to 3 months. Contrary to what might be predicted, 52.4% of the business graduates as compared to 38% of the humanities graduates have had only one full-time job since graduation.

In response to the question on current occupation, 63.8% of the business alumni indicated business/commerce, while 18.2% of the humanities graduates were working in business fields. It is important to note that a higher percentage of humanities majors were working in business than in any other category in the survey. The next popular field was education, at 14.3%. A fairly large percentage of the humanities respondents (10.6%) chose not to indicate their current occupation.

Salaries. Below are indicated the median salary ranges for recent and older humanities and business alumni.

<u>Alumni</u>	<u>Annual Salary First Job After College</u>	<u>Annual Salary Present Job</u>
Older humanities	\$ 6,000 to 8,999	\$18,000 to 20,999
Recent humanities	9,000 to 11,999	9,000 to 11,999
Older business	9,000 to 11,999	21,000 to 23,999
Recent business	12,000 to 14,999	15,000 to 17,999

The data show that humanities graduates were generally paid lower starting salaries, and that they did not make up the difference over time. Note also that the recent alumni in business moved up one salary range from first to present job, while the humanities counterparts remained at the same stratum.

Career satisfaction. Somewhat higher percentages of business alumni than humanities alumni were "very satisfied" with their present job's: challenge, location; salary and benefits; advancement potential; working conditions; and career potential. Yet, a slightly higher percentage (33.6% versus 30.4%) of the business alumni felt that they were underemployed. Interestingly, equal proportions of humanities and business alumni felt that their institutions prepared them "very well" for their current jobs. When asked, How closely is your current occupation related to your major? however, 30.4% of the humanities group and only 8.6% of the business alumni responded "not related."

Unemployment. Although only 3.2% of the business graduates and 3.2% of the humanities alumni felt that they were best described as "unemployed" earlier in the survey, 9.5% of the business alumni and 13.2% of the humanities group completed the survey items restricted to the currently unemployed. We find that the largest proportions of the unemployed in both the business and humanities groups reported that they "don't want a job" and that they are "not looking for work," in response to survey items.

Cohort effects. Except for the instances already cited, the differences between the recent and older alumni were surprisingly small or not relevant to the present study. We might mention that there are some changes

in the sources of funding for college. Also, the recent graduates appear to have increased feelings of underemployment and reduced feelings of satisfaction with their current jobs' salaries and benefits, locations, and working conditions.

Summary. The studies reported above have described the characteristics of humanities and business students as revealed by two objective measures of educational outcomes. While it is impractical to review each of the comparisons here, the following areas involved the clearest distinctions between business and humanities graduates: continuing education; attitudes on the contribution of education to personal development; satisfaction with choice of major; difficulty finding the first job; and levels of income.

Clearly, the data of the present study fail to support an unqualified positive view of the outcomes of humanities study. But, what evidence can be gathered from the data to argue against the present enrollment trends away from humanities study? The point to be made here is not that students should major in the humanities in order to be successful in business careers. Rather, a good evidence has been shown that humanities study: (1) develops general skills over the undergraduate years as well as the various other major areas considered; and (2) is perceived as contributing relatively more by its students than those of business curricula to the personal development of three critical skills in this culture--writing, speaking, and understanding written information. Humanities studies are also reported to contribute relatively more to a group of cognitive skills, social skills, and work habits that are deemed indispensable by most managers in business today.

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